

REVISIONS AFTER PROPOSAL

DESCRIPTION

STATION

STATION

DATE

NUMBER

DATE

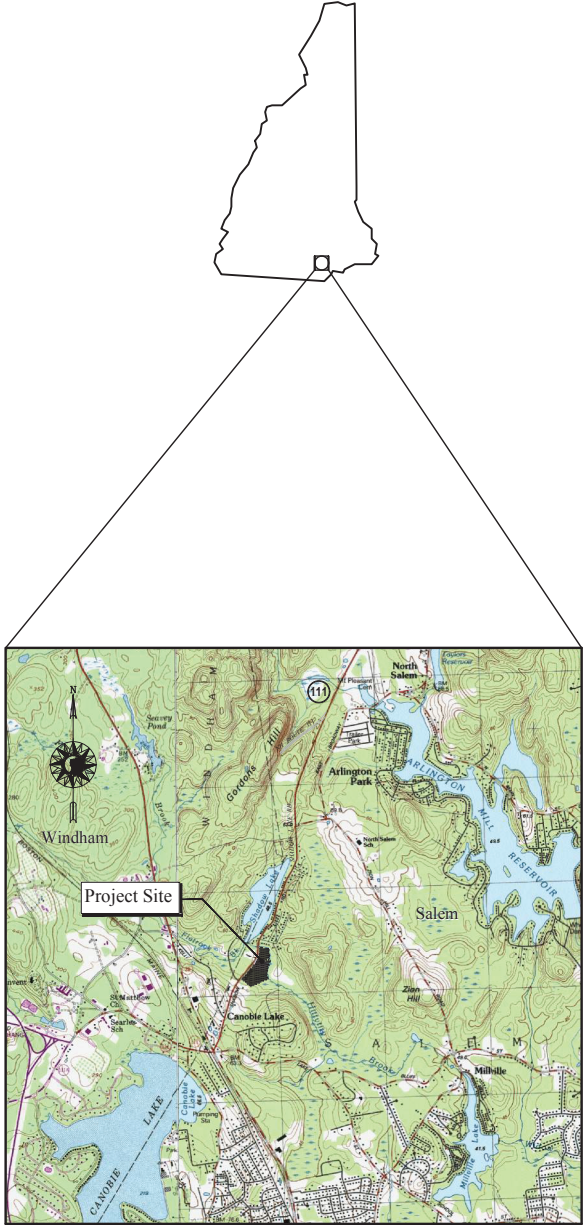
DATE

DATE

SDR PROCESSED
NEW DESIGN
SHEET CHECKED
AS BUILT DETAILS

TOWN OF SALEM, N.H.
COUNTY OF ROCKINGHAM

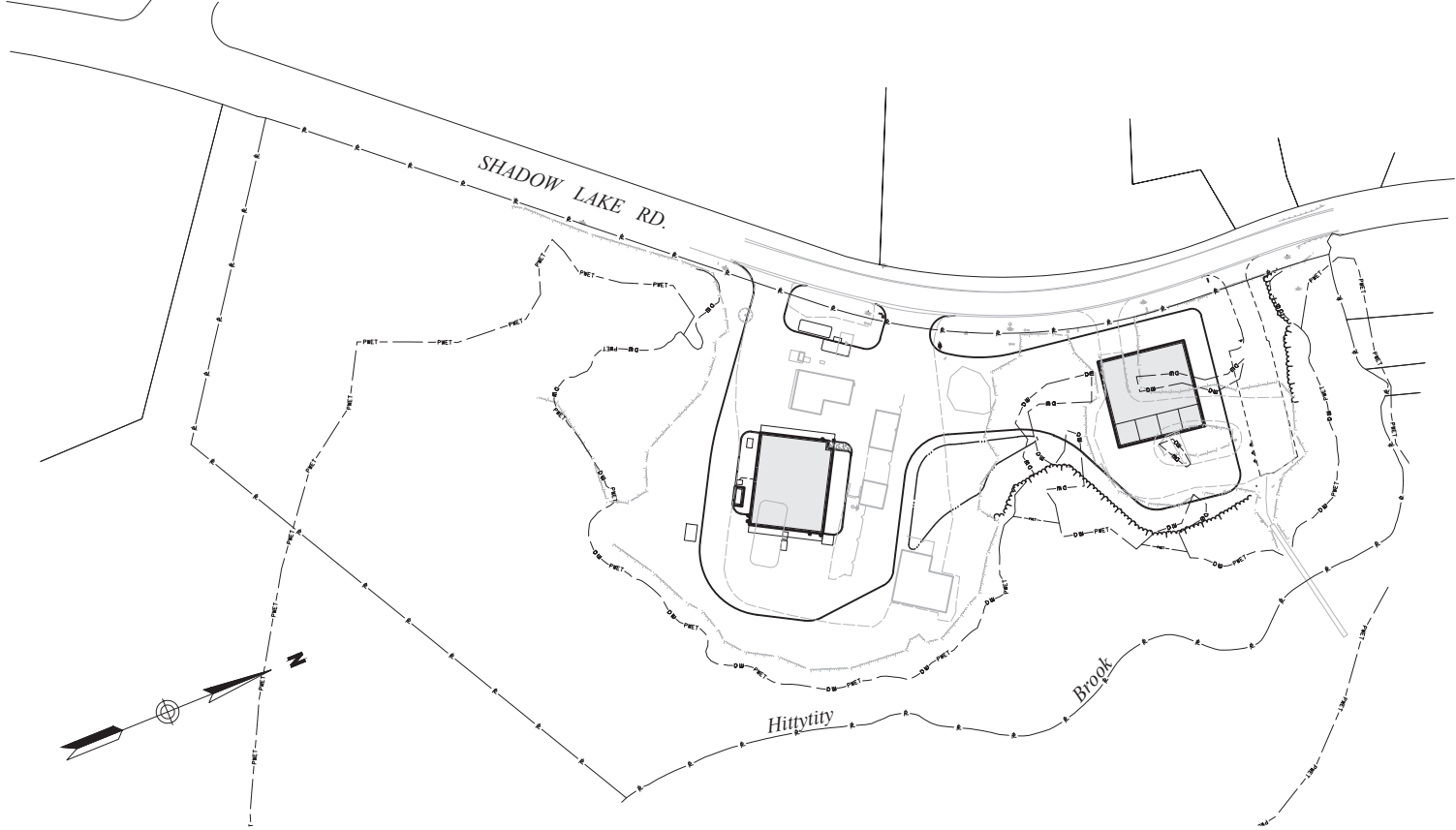
PLANS OF PROPOSED
HIGHWAY MAINTENANCE FACILITY
SHADOW LAKE ROAD (OLD NH ROUTE 111)



LOCATION MAP



GRAPHIC SCALE: 1" = 3000'



LAYOUT



GRAPHIC SCALE: 1" = 100'

INDEX OF SHEETS

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Issued for: Permitting

Date Issued: July 25, 2016

Latest Issue: February 24, 2017

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF PUBLIC WORKS

COVER SHEET



2	NHDES Wetland Bureau Review	2/24/2017	MJV
1	NHDES AoT Review	10/14/2016	MJV
No.	Revision	Date	Appvd.
DATE PLOTTED		VHB PROJECT NO.	
JULY 25, 2016		52174.02	
DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
52174.02-COV	80666R		



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

REVISIONS AFTER PROPOSAL		STATION	STATION	DATE	NUMBER	DATE	DATE	DATE
SDR PROCESSED	NEW DESIGN							
	SHEET CHECKED							
	AS BUILT DETAILS							

Legend					
Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			RIPRAP
		EASEMENT			CONSTRUCTION ENTRANCE
		BUILDING SETBACK			TOP OF CURB ELEVATION
		PARKING SETBACK			BOTTOM OF CURB ELEVATION
		BASELINE			SPOT ELEVATION
		CONSTRUCTION LAYOUT			TOP & BOTTOM OF WALL ELEVATION
		ZONING LINE			BORING LOCATION
		TOWN LINE			TEST PIT LOCATION
		LIMIT OF DISTURBANCE			MONITORING WELL
		WETLAND LINE WITH FLAG			UNDERDRAIN
		FLOODPLAIN			DRAIN
		DELINEATED WETLAND			ROOF DRAIN
		PRIME WETLAND			SEWER
		NO DISTURB ZONE			FORCE MAIN
		200' RIVERFRONT AREA			OVERHEAD WIRE
		GRAVEL ROAD			WATER
		EDGE OF PAVEMENT			FIRE PROTECTION
		BITUMINOUS BERM			DOMESTIC WATER
		BITUMINOUS CURB			GAS
		CONCRETE CURB			ELECTRIC
		CURB AND GUTTER			STEAM
		EXTRUDED CONCRETE CURB			TELEPHONE
		MONOLITHIC CONCRETE CURB			FIRE ALARM
		PRECAST CONC. CURB			CABLE TV
		SLOPED GRAN. CURB			CATCH BASIN
		VERT. GRAN. CURB			DOUBLE CATCH BASIN
		LIMIT OF CURB TYPE			GUTTER INLET
		SAWCUT			DRAIN MANHOLE
		BUILDING			TRENCH DRAIN
		BUILDING ENTRANCE			PLUG OR CAP
		LOADING DOCK			FLARED END SECTION
		BOLLARD			HEADWALL
		DUMPSTER PAD			SEWER MANHOLE
		SIGN			CURB STOP & BOX
		DOUBLE SIGN			WATER VALVE & BOX
		STEEL GUARDRAIL			TAPPING SLEEVE, VALVE & BOX
		WOOD GUARDRAIL			SIAMESE CONNECTION
		PATH			FIRE HYDRANT
		TREE LINE			WATER METER
		WIRE FENCE			POST INDICATOR VALVE
		FENCE			WATER WELL
		STOCKADE FENCE			GAS GATE
		STONE WALL			GAS METER
		RETAINING WALL			ELECTRIC MANHOLE
		STREAM / POND / WATER COURSE			ELECTRIC METER
		DETENTION BASIN			LIGHT POLE
		HAY BALES			TELEPHONE MANHOLE
		SILT FENCE			TRANSFORMER PAD
		EROSION CONTROL BARRIER			UTILITY POLE
		TREE PROTECTION FENCE			UTILITY POLE WITH LIGHT
		ROCK LINE (CROSS SECTIONS)			GUY POLE
		DITCH			GUY WIRE & ANCHOR
		SLOPE LINE (CUT)			HAND HOLE
		SLOPE LINE (FILL)			PULL BOX
		MINOR CONTOUR			TRAFFIC SIGNAL MAST ARM
		MAJOR CONTOUR			MATCHLINE
		PARKING COUNT			LIMIT OF WORK
		COMPACT PARKING STALLS			
		DOUBLE YELLOW LINE			
		STOP BAR			
		CROSSWALK			
		ACCESSIBLE CURB RAMP			
		ACCESSIBLE PARKING			
		VAN-ACCESSIBLE PARKING			

Abbreviations	
General	
ABR	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
CONST.	CONSTRUCT
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EXIST	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND SALVAGE
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
AST	ABOVE GROUND STORAGE TANK
CB	CATCH BASIN
OMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE
UST	UNDERGROUND STORAGE TANK

- Notes:
- General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.

2. FOR THE PURPOSES OF THIS PROJECT THE "DEPARTMENT" SHALL REFER TO THE NHODS DIVISION OF PUBLIC WORKS AND THE "ENGINEER" SHALL REFER TO THE DESIGN ENGINEER.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND NHDOT REQUIREMENTS.

4. ACCESSIBLE ROUTES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

5. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, GRAVEL AREAS, WALKS, ETC.) SHALL RECEIVE 3/8 INCHES HUMUS (ITEM 647.1) AND SLOPE SEED (ITEM 644.44), OR AS OTHERWISE SPECIFIED ON THE PLANS.

6. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE CONSTRUCTION.

7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.

8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND NHDOT STANDARDS (LATEST EDITIONS).

9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER OR OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES, BASED ON VISUAL, OLFACTORY OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL(S) TO AVOID SPREADING THE MATERIAL AND SHALL NOTIFY THE DEVELOPER AND THE DEPARTMENT IMMEDIATELY. A THIRD PARTY CONSULTANT WILL BE BROUGHT IN BY THE DEVELOPER TO PERFORM TESTING AND TO DEVELOP A MANAGEMENT AND/OR REMEDIATION PLAN BEFORE THE CONTRACTOR IS ALLOWED TO PERFORM ADDITIONAL WORK AT THAT LOCATION. HANDLING AND DISPOSAL OF CONTAMINATED MATERIALS IS NOT INCLUDED IN THE CONTRACTOR'S WORK AND COULD BE CAUSE FOR ADDITIONAL REQUIREMENTS IN THE PERFORMANCE OF THE WORK AS WELL AS ADDITIONAL COMPENSATION.

11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.

12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT.

13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO THE DEPARTMENT.

14. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THAT THE DEPARTMENT HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA. THE CONTRACTOR SHALL PROVIDE THIRD PARTY CONSULTANT SERVICES THAT SHALL BE RESPONSIBLE FOR MONITORING AND INSPECTING CONSTRUCTION ACTIVITIES FOR COMPLIANCE WITH THE NPDES PHASE II CONSTRUCTION GENERAL PERMIT (CGP) AND THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AT NO COST TO THE DEPARTMENT, AND SHALL REPORT FINDINGS TO THE CONTRACTOR AND DEPARTMENT.

15. THIS PROJECT IS SUBJECT TO NHDES ALTERATION OF TERRAIN BUREAU PERMIT AOT-1170 DATED OCTOBER 31, 2016 AND ITS CONDITIONS. THE CONTRACTOR SHALL FILE WITH THE NHDES ALTERATION OF TERRAIN BUREAU, A START OF CONSTRUCTION NOTIFICATION AT LEAST 7 DAYS PRIOR TO THE START OF CONSTRUCTION AND A COMPLETION OF CONSTRUCTION NOTIFICATION AT THE END OF THE PROJECT.
- Utilities (Continued)

8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.

9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS, IF REQUIRED, IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.

10. ALL DRAINAGE STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS.

11. AS-BUILT DRAWINGS OF ALL UTILITIES, DRAINAGE STRUCTURES, ROADWAYS AND ALL ASSOCIATED WORK WITHIN NHDOT JURISDICTIONAL AREAS SHALL BE SUBMITTED TO NHDOT DIVISION OF PUBLIC WORKS IN PDF FORMAT.
- Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.

2. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A LICENSED LAND SURVEYOR (LLS).

3. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES. RESULTS SHALL BE SUBMITTED TO THE DEPARTMENT AND ENGINEER.

4. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

5. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- Construction Sequence

1. SURVEY AND STAKE LIMITS OF CLEARING AND GRUBBING.

2. INSTALL EROSION CONTROL MEASURES INCLUDING, SILT FENCING, HAY BALES, CONSTRUCTION EXITS, ETC. PRIOR TO START OF CONSTRUCTION, TO BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.

3. CONSTRUCT TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN THE STORMWATER POLLUTION PREVENTION PLAN.

4. CLEAR AND GRUB ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND PERFORM DEMOLITION OPERATIONS.

5. REPAIR, CLEAN, AND REPLACE ANY SEDIMENT CONTROLS DAMAGED DURING AND/OR AFTER RAINFALL EVENTS.

6. STRIP LOAM AND PAVEMENT, OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK AND STOCKPILE EXCESS MATERIAL.

7. PERFORM PRELIMINARY GRADING AND CONSTRUCT TEMPORARY DIVERSION SWALES AS REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT THE PRELIMINARY GRADING ALLOWS SURFACE WATER RUN-OFF FROM UNSTABILIZED AREAS TO FLOW TOWARDS THE TEMPORARY SEDIMENTATION BASINS.

8. INSTALL DRAINAGE SYSTEM, AND OTHER UTILITIES IN ACCORDANCE WITH THE PLANS AND DETAILS.

9. INSTALL HAY BALES AND INLET PROTECTION AT ALL PROPOSED CATCH BASINS AS THEY ARE CONSTRUCTED, IN ACCORDANCE WITH THE DETAILS.

10. PERFORM FINAL FINE GRADING INCLUDING SLOPE STABILIZATION BLANKETS.

11. PERFORM ALL REMAINING CONSTRUCTION. (e.g. MEDIAN AND PAVEMENT AREAS).

12. LOAM AND SEED ALL REMAINING DISTURBED AREAS.

13. REMOVE TEMPORARY EROSION CONTROL MEASURES, SILT FENCE, ETC. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.


14. CLEAN ALL DRAINAGE BASINS, STRUCTURES, PIPES, AND SUMPS WITHIN THE PROJECT LIMITS OF ALL SILT AND DEBRIS.
- Existing Conditions Information

1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VANASSE HANGEN BRUSTLIN, INC. (VHB) IN MAY 2014. TOWN OF SALEM GIS, AND FROM PLANS AND DEEDS OF RECORD. THE TOPOGRAPHY IS BASED ON THE "LIDAR FOR THE NORTHEAST PROJECT" COLLECTED IN THE WINTER AND SPRING OF 2011.

2. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY NHDOT IN MAY 2015 AND FIELD VERIFIED BY GOVE ENVIRONMENTAL SERVICES, INC. IN NOVEMBER 2015.

3. FLAGS MARKING THE WETLANDS WERE LOCATED BY NHDOT AND GOVE ENVIRONMENTAL SERVICES, INC.

4. TOPOGRAPHY: ELEVATIONS ARE BASED ON N.A.V.D. 1988.

 <div>2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900</div>				STATE OF NEW HAMPSHIRE				
				DEPARTMENT OF TRANSPORTATION		o	BUREAU OF PUBLIC WORKS	
				LEGEND AND GENERAL NOTES				
				No.	Revision	Date	Appvd.	
DATE		VHB PROJECT NO.		DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS	
FEBRUARY 24, 2017		52174.02		52174.02—LEG	80666R	C-1	10	

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STATION

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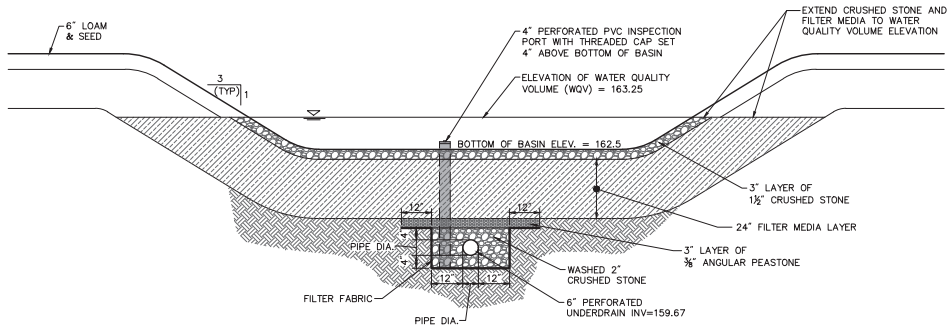
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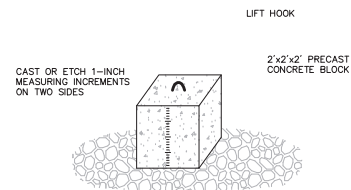
DESCRIPTION



Surface Filtration Basin Cross-Section

N.T.S.

Source: VHB

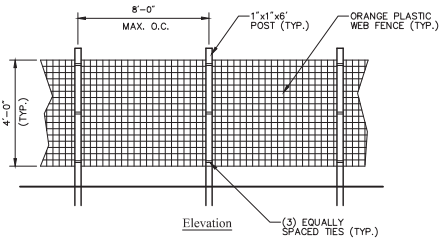
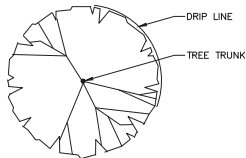


Sediment Forebay Measuring Block

N.T.S.

Source: VHB

REV 06/15

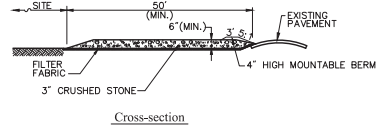
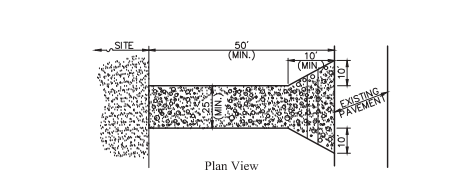


Tree Protection Fence

N.T.S.

Source: VHB

LD_610



Notes:

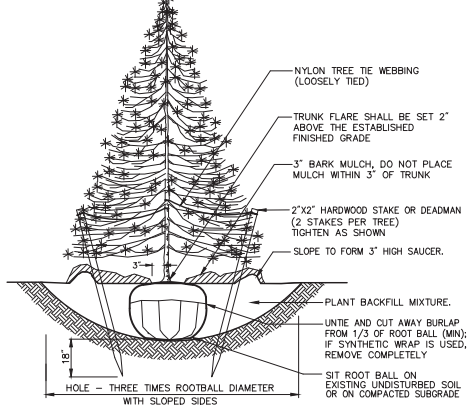
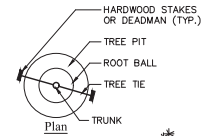
- ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
- STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

N.T.S.

Source: VHB

REV 6/08



Evergreen Tree Planting

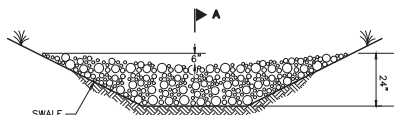
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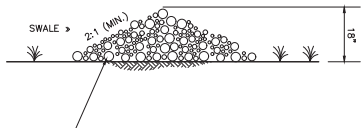
LD_604

Surface Filtration Basin Notes:

- THE FILTER MEDIA SHALL CONSIST OF ONE OF THE FOLLOWING MIXTURES VOLUME:
 - 50% TO 55% BY VOLUME SAND ALSO IDENTIFIED AS ASTM C-33 CONCRETE SAND, 20% TO 30% BY VOLUME OF LOAMY SAND TOPSOIL WITH 15% TO 25% FINES PASSING THE NUMBER 200 SIEVE, AND 20% TO 30% BY VOLUME MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE NUMBER 200 SIEVE;
 - 20% TO 30% BY VOLUME OF MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH THAT HAS NO MORE THAN 5% FINES PASSING THE NUMBER 200 SIEVE, WITH 70 TO 80% BY VOLUME LOAMY COARSE SAND USED IN THE MIXTURE MEETING THE FOLLOWING SIEVE ANALYSIS SPECIFICATION:
 - FROM 85 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 10 SIEVE;
 - FROM 70 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 20 SIEVE;
 - FROM 15 TO 40 PERCENT BY WEIGHT SHALL PASS THE NUMBER 60 SIEVE; AND
 - FROM 8 TO 15 PERCENT BY WEIGHT SHALL PASS THE NUMBER 200 SIEVE;
 - FILTER MEDIA SHALL BE FIELD TESTED FOR PERMEABILITY RATE PRIOR TO PLACING IN BASIN. GRADATION SHALL BE ADJUSTED, IF REQUIRED, TO MEET THE DESIGN PERMEABILITY RATE OF 2.5 IN/HR (± 0.5 IN/HR.) ADJUSTED GRADATIONS AND PERMEABILITY RATES SHALL BE SUBMITTED TO DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. ORGANIC CONTENT SHALL MEET REQUIREMENTS ABOVE.
- BOTTOM OF BASIN SHALL NOT BE COVERED WITH GRASS.



ELEVATION



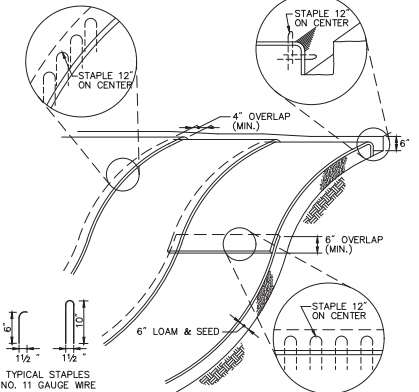
SECTION A-A

Stone Check Dam

N.T.S.

Source: VHB

REV LD_616NH



Notes:

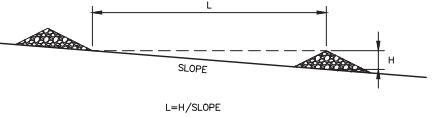
- BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6\"/>

Erosion Control Blanket Slope Installation

N.T.S.

Source: VHB

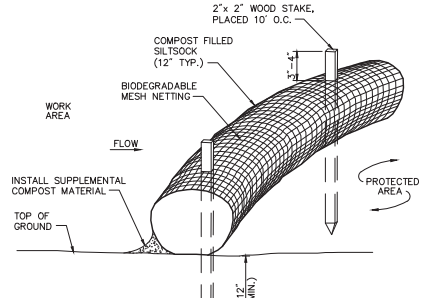
LD_680



CHECK DAM SPACING

Notes:

- STONE CHECKDAMS ARE NOT SPECIFICALLY SHOWN ON THE PLANS HOWEVER ARE AVAILABLE TO THE CONTRACTOR AS A POTENTIAL MEANS OF EROSION CONTROL DURING CONSTRUCTION.
- THE CHECK DAMS ARE TO BE TEMPORARY UNLESS OTHERWISE NOTED ON THE PLANS. TEMPORARY CHECK DAMS SHALL BE REMOVED UPON STABILIZATION OF UPSTREAM TRIBUTARY RUNOFF AREAS.
- THE MAXIMUM SPACING OF THE TEMPORARY CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE OVERFLOW ELEVATION OF THE DOWNSTREAM CHECK DAM, HOWEVER MINIMUM SPACING (L) MAY BE 50 FEET.
- STONE CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS AND ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY.
- SEDIMENT SHOULD BE REMOVED FROM BEHIND THE CHECK DAMS WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE CHECK DAM.
- WHEN CHECK DAMS ARE REMOVED, THE DISTURBED AREA SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE, SEEDED AND MULCHED WITH STRAW.



Notes:

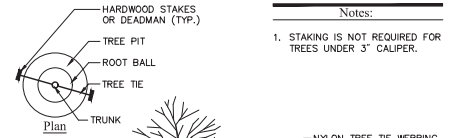
- SILT SOCK SHALL BE FILTREXX SILT SOCK, OR APPROVED EQUAL.
- SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
- COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsock - Erosion Control Barrier

N.T.S.

Source: VHB

LD_658



Tree Planting (For Trees Under 4\"/>

N.T.S.

Source: VHB

LD_602



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION BUREAU OF PUBLIC WORKS

SITE DETAILS

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	DATE	VHB PROJECT NO.	
	FEBRUARY 24, 2017	52174.02	

DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
52174.02-DT	80666R	C-3	10

REVISIONS AFTER PROPOSAL

DESCRIPTION

STATION

STATION

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NUMBER

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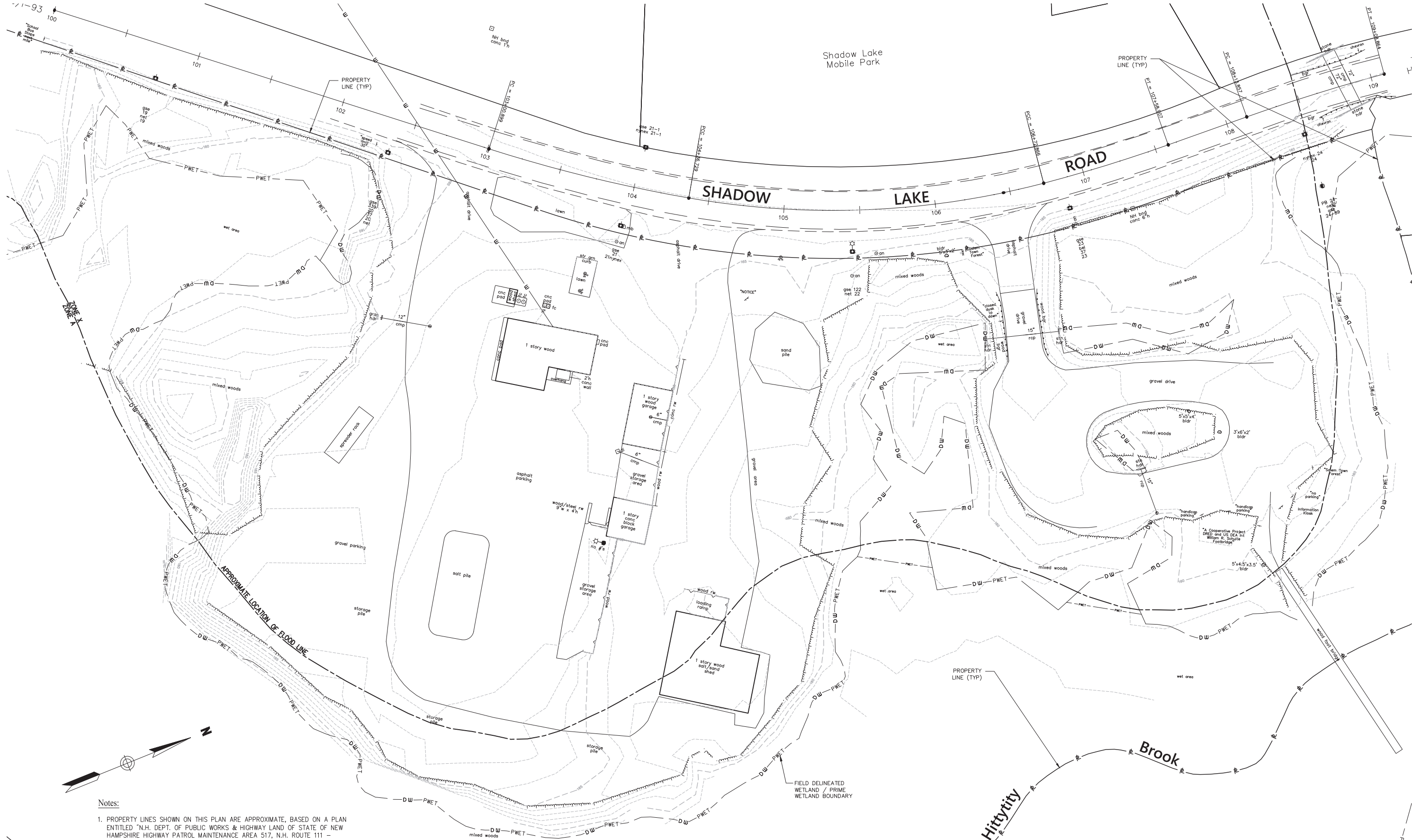
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NEW DESIGN

SHEET CHECKED

AS BUILT DETAILS

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Notes:

1. PROPERTY LINES SHOWN ON THIS PLAN ARE APPROXIMATE, BASED ON A PLAN ENTITLED "N.H. DEPT. OF PUBLIC WORKS & HIGHWAY LAND OF STATE OF NEW HAMPSHIRE HIGHWAY PATROL MAINTENANCE AREA 517, N.H. ROUTE 111 - SALEM, N.H.", PREPARED BY N.H. DEPT. PUBLIC WORKS & HIGHWAYS, DATED MARCH 1975.
2. THE EXISTING CONDITIONS SHOWN ON THIS PLAN HAVE BEEN PROVIDED BY THE NHDOT.
3. LOT 6493 LIES COMPLETELY WITHIN THE RURAL ZONE AS SHOWN ON THE TOWN OF SALEM ZONING MAP DATED APRIL 2008.
4. THE SITE LIES PARTIALLY WITHIN ZONE X (AREA OF 0.2% ANNUAL CHANCE FLOOD) AND ZONE A (AREA SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0553E AND 33015C0561E, EFFECTIVE DATE MAY 17, 2005.



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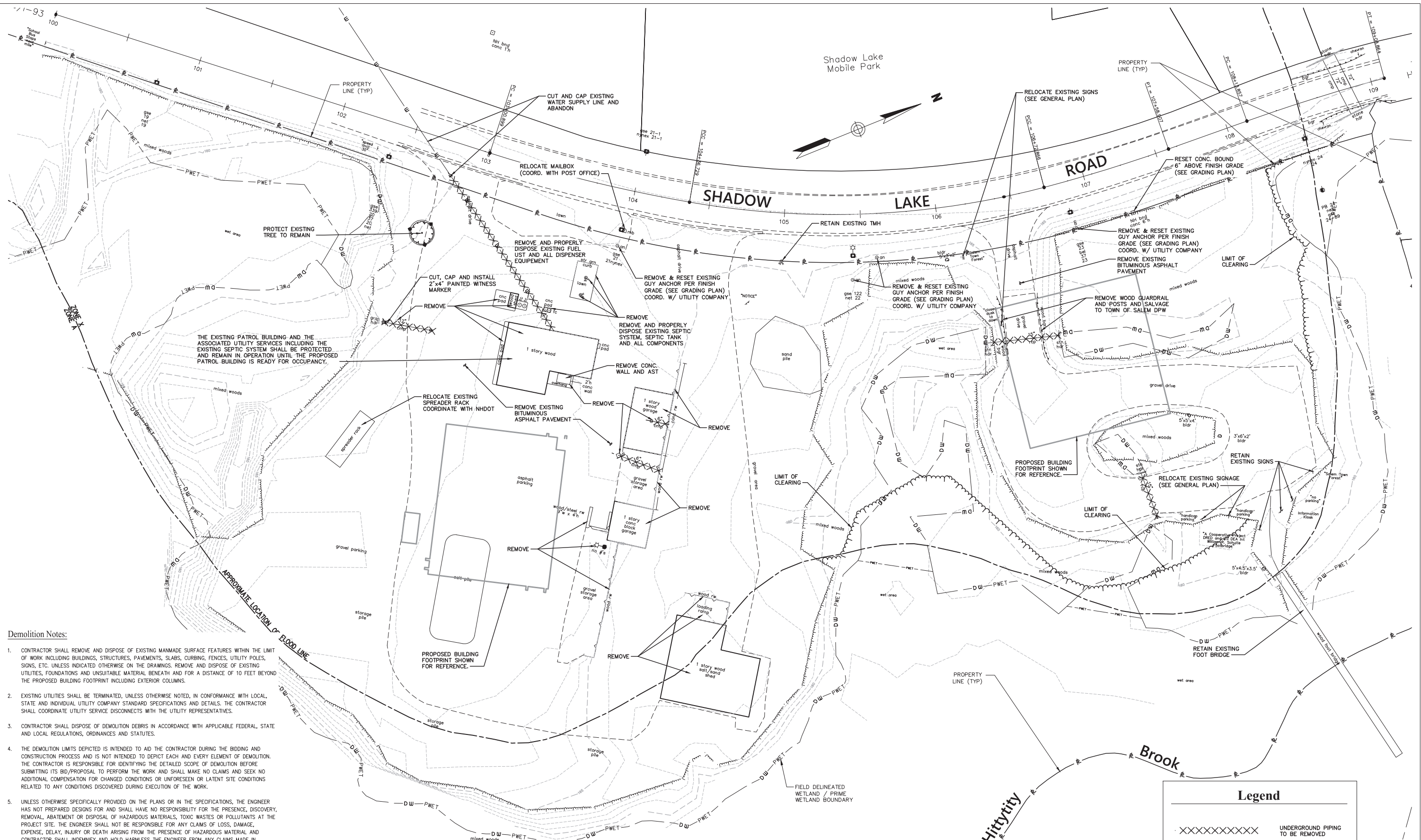
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STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ○ BUREAU OF PUBLIC WORKS

EXISTING CONDITIONS PLAN

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1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
4. THE DEMOLITION LIMITS DEPICTED IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.
6. THE STATE WILL PROVIDE THE CONTRACTOR WITH A COPY OF AN ABATEMENT REPORT FOR THE EXISTING BUILDINGS.
7. WITHIN THE LIMIT OF WORK THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ANY INVASIVE PLANT SPECIES IN CONFORMANCE WITH CHAPTER AGR3800 AND THE NEW HAMPSHIRE DEPARTMENT OF AGRICULTURE, MARKETS & FOOD "CONTROL OF INVASIVE PLANTS" GUIDE. THE CONTRACTOR SHALL REVIEW SITE CONDITIONS FOR MANAGEMENT OF INVASIVE SPECIES PRIOR TO BIDDING.
8. THE EXISTING PATROL BUILDING AND THE UTILITIES SERVING THE PATROL BUILDING INCLUDING THE EXISTING SEPTIC SYSTEM SHALL REMAIN IN OPERATION UNTIL THE PROPOSED PATROL BUILDING IS READY FOR OCCUPANCY.

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				DEMOLITION PLAN			
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DESCRIPTION

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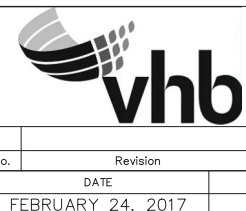
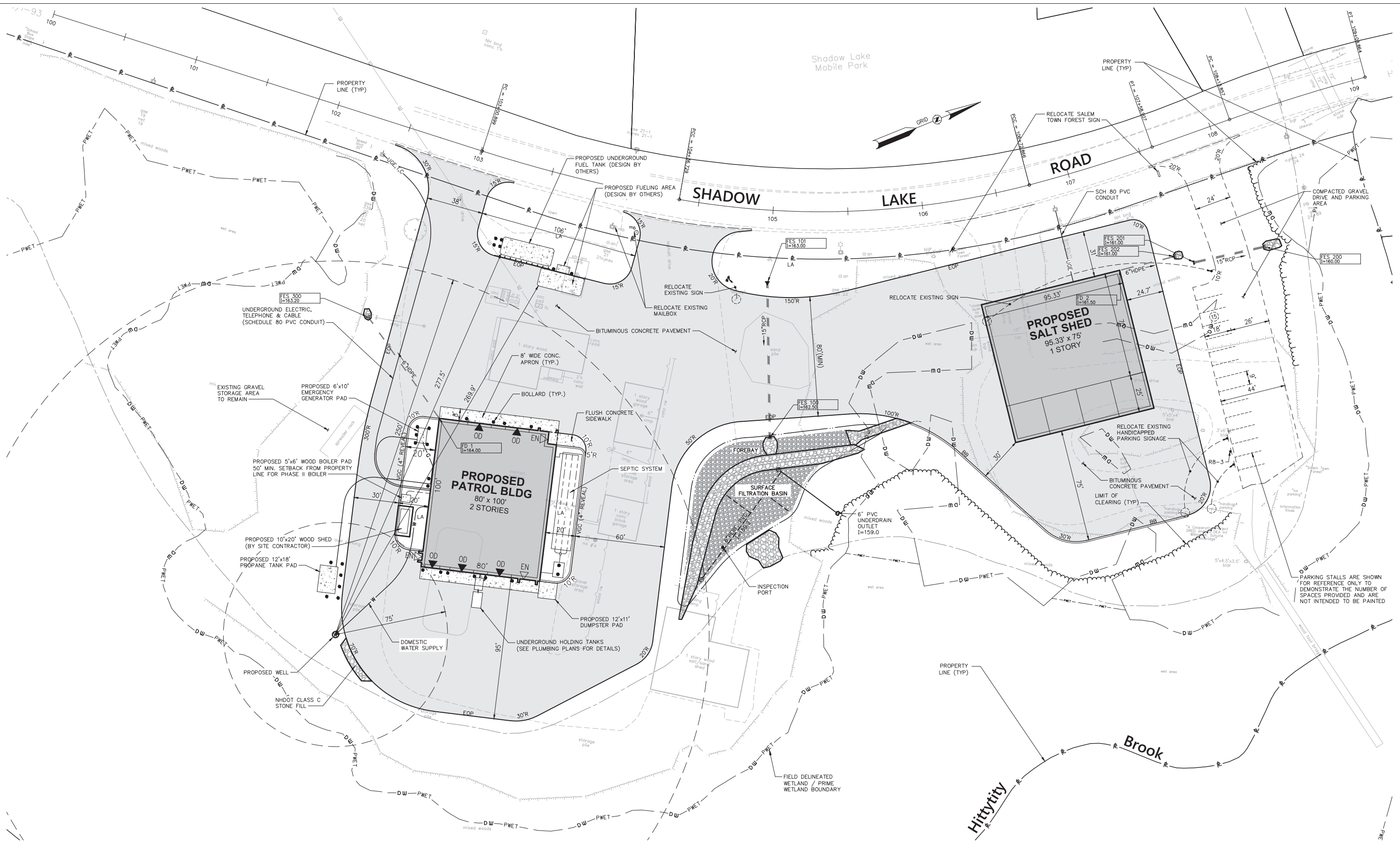
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2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900		STATE OF NEW HAMPSHIRE				
		DEPARTMENT OF TRANSPORTATION		o	BUREAU OF PUBLIC WORKS	
		GENERAL PLAN - MAINTENANCE FACILITY				
			Date	Appvd.		
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		52174.02—GEN		80666R	C—6	10

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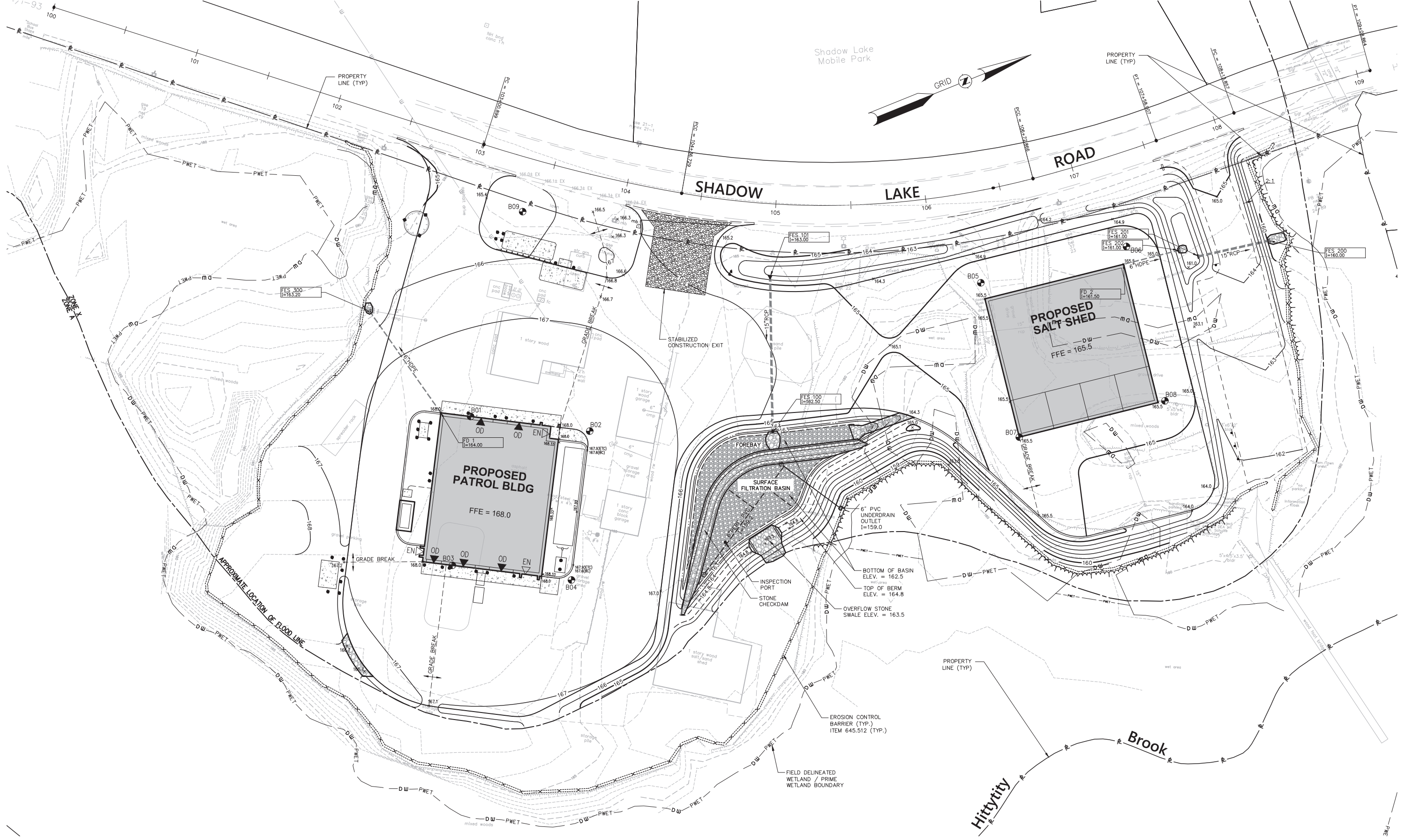
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STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION		BUREAU OF PUBLIC WORKS	
GRADING PLAN - MAINTENANCE FACILITY			
DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
52174.02-GD	80666R	C-7	10

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Planting Notes

1. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
10. AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
11. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
12. THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

Plant Maintenance Notes

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.
3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.

Tree Protection

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCE. ERECT FENCE AT EDGE OF THE TREE DRIPLINE PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA. CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE PROTECTION AREA.
3. DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.



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STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION		BUREAU OF PUBLIC WORKS	
PLANTING PLAN - MAINTENANCE FACILITY			
DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
52174.02-LA	80666R	C-8	10

DESCRIPTION

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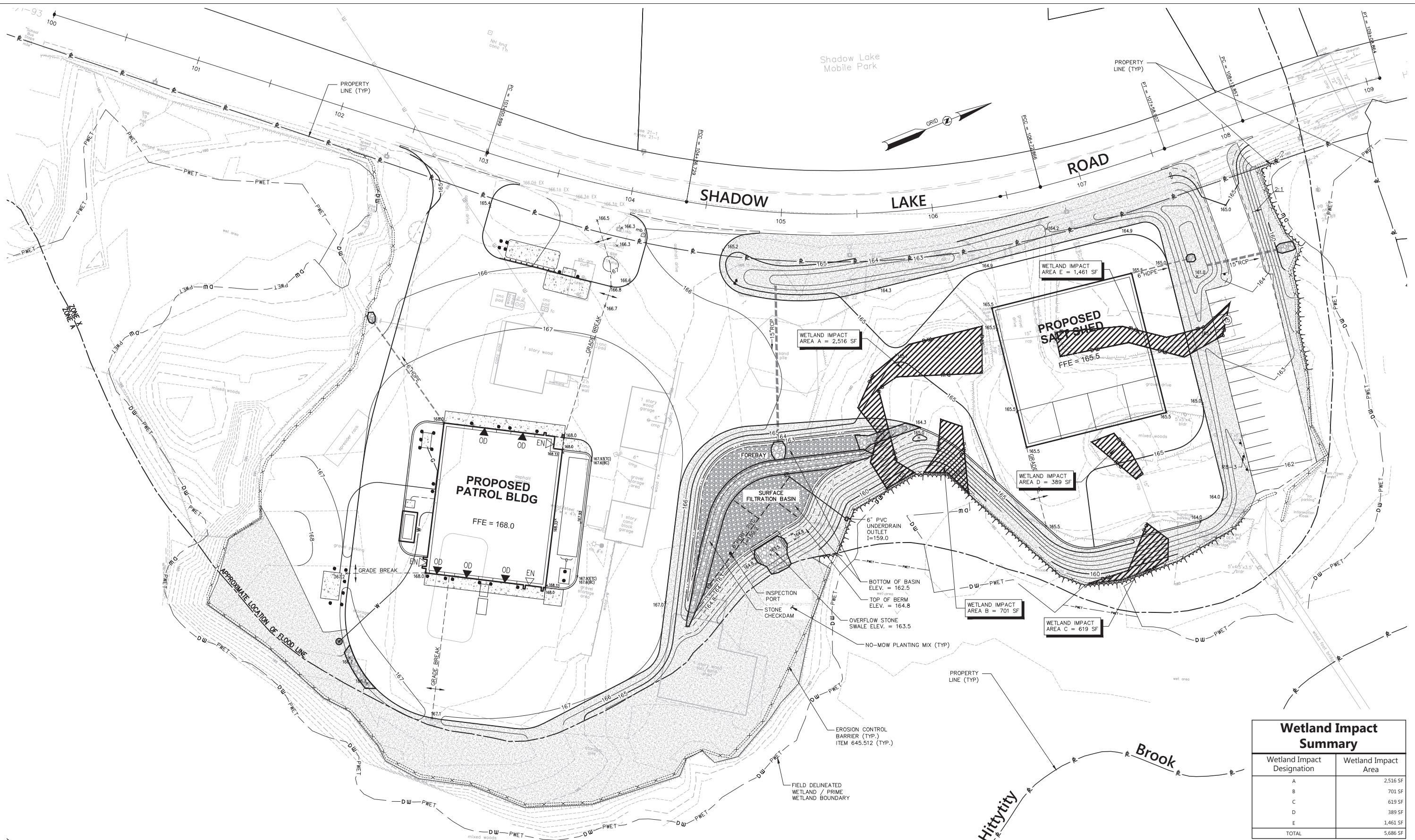
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STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION		BUREAU OF PUBLIC WORKS	
WETLAND IMPACT PLAN - MAINTENANCE FACILITY			
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52174.02—WET	80666R	C—9	10

Wetland Impact Summary	
Wetland Impact Designation	Wetland Impact Area
A	2,516 SF
B	701 SF
C	619 SF
D	389 SF
E	1,461 SF
TOTAL	5,686 SF

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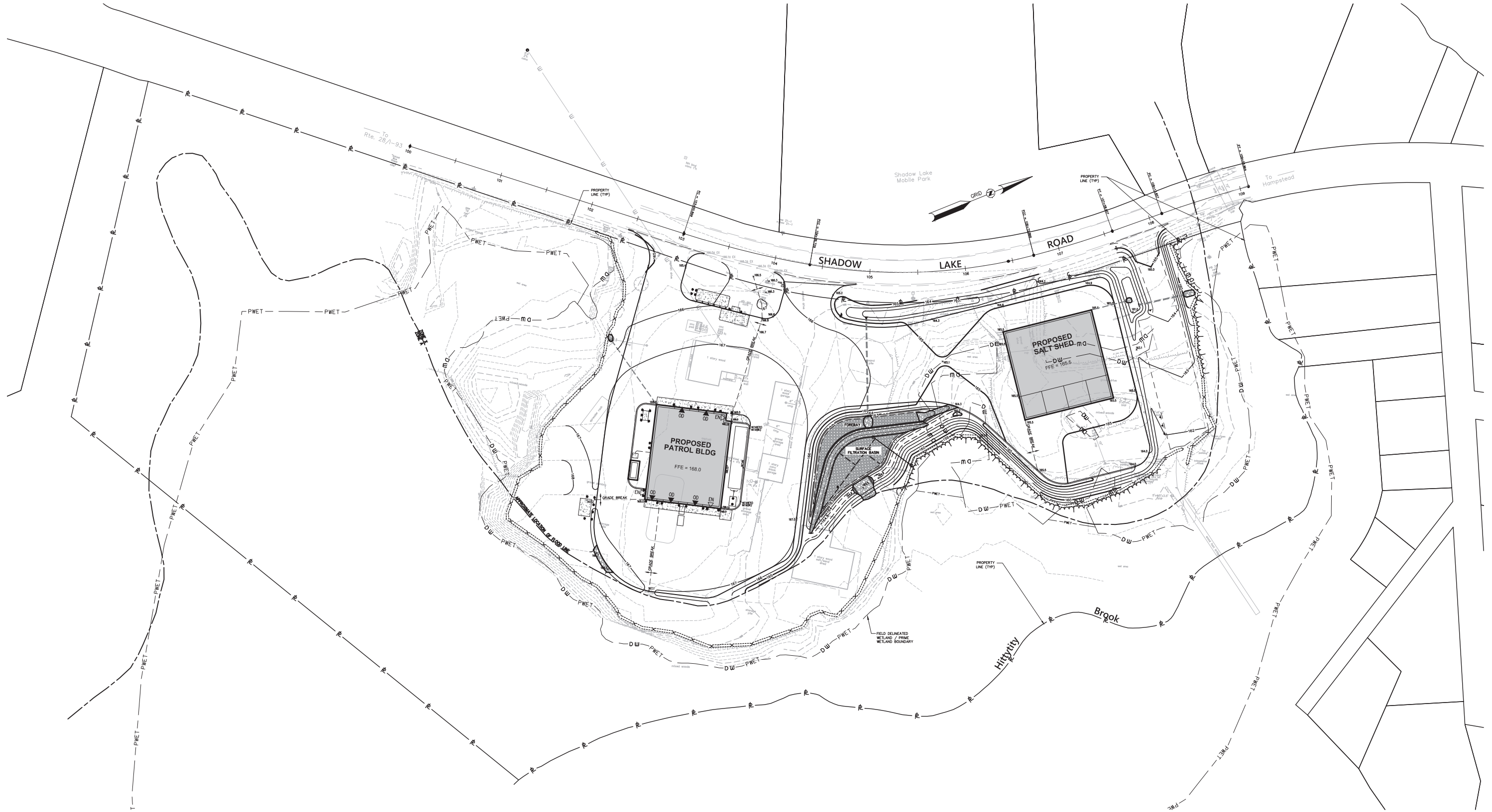
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STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION		BUREAU OF PUBLIC WORKS	
OVERALL SITE PLAN - MAINTENANCE FACILITY			
DRAWING	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
52174.02-OSP	80666R	C-10	10